

IB chemistry Drugs and Medicine - Worksheet 6 Ethanol and Ethanol Detection

1. One method for detecting alcohol in breath involves blowing through a tube containing crystals of acidified potassium dichromate(VI). The alcohol turns the crystals from orange to green. Explain what happens to both the dichromate(VI) ion and the alcohol in this reaction.

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2. A modern method for accurately determining the amount of alcohol in breath uses an intoximeter. Explain how an intoximeter works.

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3. Suggest why it is advisable not to drink alcohol when taking other drugs.

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4. The breathalyser can be used to detect ethanol in breath. Explain how this can be done, by reference to the substance used, the colour change and the type of reaction occurring.

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